Amendments to the Claims: This listing of claims will replace all prior versions, and listings, of claims in the application

Listing of Claims:

1-53. Canceled.

54. (New) An endoluminal prosthesis, comprising: a tubular wire support having a proximal end, a distal end and a central lumen extending therethrough; the wire support comprising at least a first and a second axially adjacent tubular segment, joined by a connector extending therebetween; wherein the first and second segments and the connector are formed from a single length of wire.

55. (New) An endoluminal prosthesis as in claim 54, comprising at least three segments and two connectors.

56. (New) An endoluminal prosthesis as in claim 54, comprising at least five segments and four connectors.

57. (New) An endoluminal prosthesis as in claim 54, wherein the wire in each segment comprises a series of proximal bends, a series of distal bends, creating a series of strut segments connecting the proximal bends and distal bends to form a tubular segment wall.

58. (New) An endoluminal prosthesis as in claim 57, wherein at least some of the strut segments are substantially linear.

59. (New) An endoluminal prosthesis as in claim 57, wherein each segment comprises from about 4 proximal bends to about 12 proximal bends.

60. (New) An endoluminal prosthesis as in claim 54, having at least a proximal segment, an intermediate segment and a distal segment, wherein the prosthesis is expandable from a reduced cross section to an expanded cross section.

61. (New) An endoluminal prosthesis as in claim 54, further comprising a polymeric layer on the wire support.

62. (New) An endoluminal prosthesis as in claim 61, wherein the layer comprises a tubular PTFE sleeve surrounding at least a central portion of the prosthesis.

63. (New) A multizone endoluminal prosthesis, comprising: a tubular wire support having a proximal end, a distal end, and a central lumen extending therethrough; the wire support comprising at least a first and a second axially adjacent tubular segments, joined by a connector extending therebetween; wherein the first tubular segment has a different radial strength than the second tubular segment.

64. (New) An endoluminal prosthesis as in claim 63, further comprising a third tubular segment, wherein at least one of the tubular segments has a different radial strength than the other two tubular segments.

65. (New) An endoluminal prosthesis as in claim 64, wherein a proximal end of the prosthesis is self expandable to a greater diameter than a central region of the prosthesis.

66. (New) An endoluminal prosthesis, comprising an elongate flexible wire, formed into a plurality of axially adjacent tubular segments spaced along an axis, each tubular segment comprising a zig zag section of the wire, having a plurality of proximal bends and distal bends, with the wire continuing between each adjacent tubular segment, wherein the prosthesis is radially compressible into a first, reduced cross sectional configuration for implantation into a body lumen, and self expandable to a second, enlarged cross sectional configuration at a treatment site in a body lumen.

67. (New) An endoluminal prosthesis as in claim 66, comprising at least three segments formed from said wire.

68. (New) An endoluminal prosthesis as in claim 67, further comprising an outer tubular sleeve surrounding at least a portion of the prosthesis.

69. (New) An endoluminal prosthesis as in claim 67, wherein the prosthesis has a proximal end and a distal end, and at least one of the proximal end and distal end as expandable to a larger diameter than a central section of the prosthesis in an unconstrained expansion.

70. (New) An endoluminal prosthesis as in claim 66, wherein at least one distal bend on a first segment is connected to at least one proximal bend from an adjacent segment.

71. (New) An endoluminal prosthesis as in claim70, wherein the connection comprises a pivotable connection.

72. (New) An endoluminal prosthesis as in claim 71, wherein the connection comprises a metal link.

73. (New) An endoluminal prosthesis as in claim 71, wherein the connection comprises a suture.

74. (New) An endoluminal prosthesis as in claim 66, wherein the prosthesis has an expanded diameter of at least about 20 mm-30 mm in an unconstrained expansion, and the prosthesis is implantable using a catheter no greater than about 16 French.

75. (New) A prosthesis as in claim 74, wherein the prosthesis has an expanded diameter of at least about 24 mm, and is implantable on a delivery device having a diameter of no more than about 16 French.

76. (New) A method of implanting an endoluminal vascular prosthesis, comprising the steps of: providing a self expandable endoluminal vascular prosthesis, having a proximal end, a distal end and a central lumen extending therethrough, said prosthesis expandable from a first, reduced diameter to a second, enlarged diameter; mounting the prosthesis on a catheter, such that when the prosthesis is in the reduced diameter configuration on the catheter, the catheter diameter through the prosthesis is no more than about 16 French; introducing the catheter into a body lumen, and positioning the prosthesis at a treatment site in the body lumen; releasing the prosthesis at the treatment site, such that the prosthesis expands from the first diameter to the second diameter; wherein the second diameter is at least about 20 mm.

77. (New) The endoluminal prosthesis as in claim 54 further comprising:

prosthesis segments configured for insertion into the vasculature of a body, wherein said prosthesis segments are configured for engagement with one another to form said endoluminal prosthesis in the vasculature;

wherein a portion of at least one of said prosthesis segments has a different radiopacity, said portion of different radiopacity facilitating proper alignment of said prosthesis segments with respect to one another during said engagement of said prosthesis segments.

78. (New) The endoluminal prosthesis as in claim 54 further comprising:

prosthesis segments configured for engagement to one another to form said endoluminal prosthesis in a body lumen;

radiographic indicia defined on at least one of said prosthesis segments and having different radiopacity from said prosthesis segment, wherein the composite radiographic image of said radiographic indicia varies with the rotational orientation of said prosthesis segment in the body lumen;

wherein the rotational orientation of said prosthesis segment in the body lumen is indicated by said radiographic image for optional adjustment of the rotational orientation.

79. (New) A system for introducing the endoluminal prosthesis of claim 54 into a vessel to define a continuous lumen, said system comprising:

a first introducer for introducing a first prosthesis segment of said endoluminal prosthesis into the vessel, said first prosthesis segment having a portion adapted for connection to another prosthesis segment; and

a second introducer for (a) introducing a second prosthesis segment of said endoluminal prosthesis in a radially compressed state into the vessel and into said portion of said first prosthesis segment, and (b) deploying said second prosthesis segment to connect to said portion of said first prosthesis segment and to define said continuous lumen through said first prosthesis segment and said second prosthesis segment.

80. (New) The endoluminal prosthesis as in claim 54, said endoluminal prosthesis being configured for placement at an angeological bifurcation of a vessel into two branched vessels, said endoluminal prosthesis further comprising a first bifurcated graft member, at least partially supported by a bifurcated stent member, defining two lumens, at least one of which is configured to be disposed entirely within said vessel and is adapted to mate with a second stent configured to extend into one of the two branched vessels.

81. (New) The endoluminal prosthesis as in claim 54, said endoluminal prosthesis comprising proximal and distal prosthesis segments, a male engaging portion on a selected one of said proximal and distal prosthesis segments, and a female portion on another one of said proximal and distal prosthesis segments, said male engaging portion being configured to be

positioned at least partially within said female portion for inter-engagement between the outer surface of said male engaging portion and the inner surface of said female portion to resist longitudinal movement to prevent separation of said proximal and distal prosthesis segments in service, each of said male engaging portion and said female portion comprising a stent and at least one of said proximal and distal prosthesis segments comprising a graft layer attached to said stent, said graft layer being configured to be interposed between said male engaging portion and said female portion to form a substantially fluid-tight seal upon assembly.